

**Army Regulation 40-656
NAVSUPINST 4355.10
MCO 10110.45**

Medical Services

Veterinary Surveillance Inspection of Subsistence

**Headquarters
Departments of the Army, the Navy, and
the Marine Corps
Washington, DC
15 October 1986**

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SUMMARY of CHANGE

AR 40-656/NAVSUPINST 4355.10/MCO 10110.45
Veterinary Surveillance Inspection of Subsistence

Not applicable.

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Washington, DC
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NAVSUPINST 4355.10
MCO 10110.45

Effective 15 October 1986

Medical Services

Veterinary Surveillance Inspection of Subsistence

By Order of the Secretaries of the Army and the Navy:

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History. This publication has been reorganized to make it compatible with the Army electronic publishing database. No content has been changed.

Summary. This regulation of the veterinary surveillance inspection of subsistence has been revised. It establishes uniform methods for inspecting Army-, Navy-, and Marine Corps-owned subsistence. It defines the US Army veterinary Service's responsibility for surveillance-type inspections of all Service-owned subsistence received, stored, issued or sold, or shipped by military installations (including those items received from all depots and supply points). It implements AR-657/NAVSUPINST 4355.4/AFR 161-32/MCO P10110.31 as it pertains to veterinary service food hygiene, safety, and quality assurance inspections. This regulation has been revised to update references cited and includes specific instructions for inspections of the Meal, Ready-to-Eat rations and perishable subsistence. It also cites Department of the Army policies and procedures governing veterinary service surveillance inspections and Service-owned subsistence.

Applicability. This regulation applies to the Active and Reserve Component of the Army, Navy, and Marine Corps.

Proponent and exception authority. The proponent agency of this regulation is the Office of the Surgeon General, HQDA.

Impact on the New Manning System.

This regulation does not contain information that affects the New Manning System.

Army management control process. This regulation is subject to the requirements of AR 11-2. It contains internal control provisions but does not contain checklists for conducting internal control reviews. These checklists are being developed and will be published at a later date.

Supplementation. Supplementation of this regulation is prohibited without prior approval from HQDA (DASG-VCP), 5111 Leesburg Pike, Falls Church, VA 22041-3258.

Interim changes. Interim changes to this regulation are not official unless they are authenticated by the The Adjutant General. Users will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

Suggested Improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) or a related form directly to HQDA (DASG-VCP), 5111 Leesburg Pike, Falls Church, VA 22041-3258.

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Reproducible Forms

Chapter 1 Introduction

1–1. Purpose

This regulation establishes uniform methods for inspection of Service-owned foods. It defines the US Army Veterinary Service's responsibility for surveillance-type inspection of all Service-owned food received, stored, issued or sold, or shipped by installations (including those items received from all depots and supply points). It implements AR 40–657/NAVSUPINST 4355.4/AFR 161–32/MCO P10110.31 as it pertains to veterinary food hygiene, safety, and quality assurance inspections. This regulation prescribes procedures to ensure maximum serviceability for all Service-owned foods in storage and at the time of issue or sale. It also prescribes methods to furnish statistical techniques for accomplishing cost-efficient inspections as well as providing data on deterioration variations under differing conditions.

1–2. References

Required and related publications and prescribed and referenced forms are listed in appendix A.

1–3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

1–4. Responsibilities

- a. *The Surgeon General (TSG), Department of the Army (DA).* TSG, DA will—
 - (1) Develop uniform, efficient procedures for inspection of all food procured for use by the Armed Forces.
 - (2) Ensure that veterinary personnel use the procedures of this regulation to determine if foods are being stored and handled properly.
 - (3) Assign veterinary personnel for food inspection support in response to surveillance requirements and request for commanders.
 - (4) Coordinate (1), (2), and (3) above with TSG, Department of the Navy or a designated representative.
- b. *Commanders of major Army commands (MACOMs).* Commanders of MACOMs will—
 - (1) Ensure command implementation of veterinary surveillance inspections of surveillance within each area of responsibility by the US Army Veterinary Service personnel.
 - (2) Ensure provisions of adequate inspection facilities at sites requiring veterinary inspections.
 - (3) Coordinate inspections with other commands and Service through their medical department personnel.
 - (4) Ensure that accountable or responsible officers ensure timely and proper rotation and inspection of subsistence.
 - (5) Assign veterinary inspection personnel to perform inspections as prescribed by this regulation.
- c. *MACOM staff veterinarians.* These veterinarians will—
 - (1) Administer surveillance food inspection services within their commands through regulations and technical letters.
 - (2) Coordinate with other staff veterinarians and stall medical personnel of Navy/Marine commands as necessary.
- d. *Veterinary food inspection personnel.* These personnel will—
 - (1) Coordinate food inspections with other veterinary personnel to avoid duplication of effort or excessive expenditure of resources.
 - (2) Perform surveillance inspections as prescribed by procedures established in this regulation.
 - (3) Coordinate with appropriate laboratory personnel to ensure complete analysis.
 - (4) Make inspections and report results to accountable officers.
 - (5) Furnish accountable officers with written recommendations or dispositions of unfit subsistence.
- e. *Accountable officer.* Accountable officers will—
 - (1) Provide personnel and equipment necessary for assisting veterinary personnel in removing food samples from the receiving and/or storage area(s) and transporting the samples to the inspection station.
 - (2) Coordinate with the installation veterinarian all proposed changes that could—
 - (a) Have a bearing on health and sanitation.
 - (b) Require changes in budget or personnel requirements of veterinary personnel.
 - (3) take immediate corrective action when advised of deficiencies relating to the condition of foods, keeping qualities, and/or special requirements in warehousing facilities.
 - (4) Ensure timely and proper rotation of subsistence.
 - (5) Request special inspections as a result of customer complaints.
 - (6) Provide veterinary service personnel with a monthly listing of all subsistence requiring in-storage surveillance inspection. (This requirement does not apply to commissary officers.)

1–5. Inspection policies

The policies for inspection of subsistence are as follows:

- a. Veterinary service inspection of surveillance will be continuous.
- b. Items having the oldest date of packs (DOP), those that are highly susceptible to insect and rodent damage, and/or distressed products will be given priority.

1–6. Defect classification

Classifications of defects is as follows:

- a. Defective units are classified as critical, major, or minor. Each unit will be classified by its most serious defect (expressed as percent defective).

- b. Defects are classified as follows:

(1) *Critical*. A critical defect is a defect that judgment and experience indicates is likely to result in hazardous or unsafe conditions for individuals using, maintaining, or depending upon the product. A unit (can, jar, carton, and so forth) with one or more critical defects will be classified unserviceable. Also, a defect which adulterates the product (such as the presence of live or dead insects, rodent hair, feces, or other filth, exceeding established tolerances and/or enduring the product unacceptable aesthetically) will be classified as critical. In addition, any major defect that in the inspection's judgment would progress to critical severity before the next scheduled inspection will be classified as critical.

(2) *Major*. A major defect is a defect, other than critical, that is likely to result in failure or to materially reduce the usability of the product for its intended purpose. It also includes any minor defect that in the inspection's judgment would progress to major severity before the next scheduled inspection.

(3) *Minor*. A minor defect is a defect that is likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

1–7. Storage life

Shelf life data for military services stocked troop issue Federal Supply Classification (FSC) Group 89 surveillance items have been developed by the US Army Natick Research, Development, and Engineering Center (NRDEC), Natick, MA, and are published in Department of Defense (DoD) Regulation 4145.19-R-1. The data contained are based on the optimum food quality retention times rather than the maximum storage life and should be used as a guide only. Brand name resale items should be managed based on shelf life data provided by the manufacturer supplying the subsistence products and the condition of the items at time of inspection. Headquarters, Defense Personnel Support Center (DPSC), publishes master item identification lists (MILs) for semiperishable and perishable brand name resale subsistence which give shelf life data for brand name foods available for requisitioning from DPSC.

1–8. Methods of inspection

Inspection of subsistence is conducted according to the following:

a. *Sampling inspection (statistical)*. A sampling inspection estimates the condition of a lot based on examination and/or testing of a portion of the lot. Samples should be as representative of the lot as practical. Storage conditions should be considered when selecting samples.

- b. *100 percent inspection*. Every unit of the product is inspected during a 100 percent inspection.

1–9. Type of inspections

The types of inspections are as follows:

a. *Surveillance inspections*. These inspections are made to determine if Government-owned foods are wholesome and suitable for further storage, shipment, issue, sale, or consumption.

- (1) Any receipt except purchase (class 5). These inspections are made to—

- (a) Detect any change or deterioration of the food which occurred during transport.

(b) Give receiving officers an appraisal of the condition on the foods, keeping qualities, and special requirements in warehousing facilities.

- (c) Detect faulty handling, transportation, or other correctable deficiencies to prevent similar losses in the future.

(2) Prior to shipment inspection (class 6) and/or at issue or sale inspections (class 7). These inspections are performed to determine the suitability of the product for shipment, sale, or issue, based on the quality history data for each item and/or actual inspection.

- (3) During storage inspections (class 9).

(a) These inspections are performed on a planned recurring basis for conditions. Incorrect temperatures, faulty warehouse facilities, or other practices which may lead to deterioration will also be noted by the inspector.

(b) The accountable officer will routinely provide the personnel and equipment necessary to transfer food samples from the storage area to the inspection station. Veterinary personnel will notify the accountable officer when samples are ready to be picked up for return to stock.

b. *Other inspections*. These are inspections not routinely scheduled or performed at the post, camp, or station. Other inspections include the following:

(1) *Warranty inspections.* Subsistence contracts, except for some perishable items, require that the contractor guarantee supplies after the procurement receipt date at the destination. The supplies furnished will be free from defects in material and workmanship and will conform to all contract requirements. The warranty inspection is usually initiated by the findings of excessive defects or deterioration during another inspection (such as class 5 or 9). The length of the warranty period varies depending on the type of subsistence item.

(2) *Inspection of unit basic loads (UBLs).* UBLs are individual operational ratios which are stored by units for use in readiness operations or deployment. Normally, these inspections are performed only at the request of the accountable officer. However, the servicing veterinary unit should provide extra effort to ensure that these rations are inspected. (See AR 30-7 and AR 710-2 for additional information.)

(3) *Special inspections.* These inspections are requested by the accountable officer based on consumer complaints. Also, a special inspection is performed prior to the next scheduled inspection when a problem has been identified in a particular lot.

(4) *Isolated lots.* Isolated lots are lots of unknown storage history, such as captured enemy rations, lots found in storage areas with no record of inspection, returned stocks to the troop issue subsistence activity (TISA) from dining facilities or other food service accountable officers, and so forth. These lots should be inspected for all appropriate defects in appendix B and any other defects that may be applicable.

See note¹ below.

1-10. Phases of inspection

The actual inspection will be conducted in the phases discussed in a and b below.

a. *Closed-package inspection (CPI).* Two types of closed-package inspections are as follows:

(1) *Nondestructive closed-package inspection.* These examinations of the product's packing and packaging material can be accomplished without destroying the inner packaging material. These examinations will be completed before the start of an open-package inspection. Following CPI, the sample unit can normally be returned to the lot from which drawn, unless it is subsequently used for the open-package phase of inspection. All sample units will be inspected for the appropriate defects in appendix B and any other defects that may be applicable. Destructive inspection during the closed-package inspection is allowed, based on inspection judgment.

(2) *Destructive inspection.* This examination of the internal contents of a package showing external major or critical defects identifies the defects and/or extent of defects. Destructive inspection should be kept to a minimum and not be related to or confused with the open-package phase of inspection described below.

b. *Open-package inspection (OPI).* Open-package inspection will be accomplished according to the following:

(1) This inspection may detect deterioration in the contents of normal-appearing packages. It will be performed, when required, after the CPI has been completed. OPI may destroy the inner packaging material, such as opening the can or cutting or tearing the flexible packaging material. Consequently, after such inspection, the product often cannot be returned to the lot since the product or packaging has been destroyed. Normally OPI will be performed at time of receipt, 6 months prior to reaching the inspection test date (ITD) or recommended storage life, and on products that have exceeded the ITD or recommended storage life. (See para 1-7.) Sample units for the OPI will be selected from those units used for CPI. Only those packages which did not show critical or major defects (normal-appearing) during the CPI will be used as OPI sample units.

(2) Each sample unit will be examined for defects in appendix B and any other defects that may be applicable. See note² below.

1-11. Selection of samples

Samples will be selected according to tables 2-1 through 2-3 and 3-1 through 3-4, as applicable. Samples selected will be representative of the lot. A table of random numbers (refer to MIL HDBK 53) need not be used except as noted in paragraph 2-4c(1). Inspectors must determine the following before selecting a sample:

a. The number of units packed in each case.

b. When sublots are present, samples are to be proportional to the size of the sublots.

1-12. Laboratory analysis

Laboratory analysis will be performed according to the following:

a. When doubt exists concerning the condition of food items, samples will be submitted to the appropriate laboratory for analysis. Samples should not normally be submitted for evaluation of characteristics which can be determined adequately by the veterinary food inspector. An exception would be when a large lot or high dollar item exhibits an off-flavor, -odor, -color, -texture, or when necessary facilities and equipment are not available to the inspector. When the laboratory can furnish objective values and the inspector is limited to subjective evaluations,

¹ Military Standards (MIL-STD) 904 contains additional guidance on the inspection of infestable subsistence items.

² Critically defective units found during inspections will be removed by the inspector and disposed of according to local policy. All cases or other outer containers that have been opened for inspection or examination purposes will be required to be resealed and stamped according to TB MED 263 before returning them to stock.

laboratory results should be used in making final disposition recommendations. Laboratory samples will consist of three units (cans, jars, packets, and so forth) of the abnormal product and three units of the normal product, if possible. If only normal or abnormal units are available, six samples should be submitted.

b. Section A of DD form 1222 (Request for and Results of Tests) will be completed and forwarded with samples. The form will contain the following information:

(1) A history of the product with information that will be helpful in the laboratory evaluation and the reason for submission.

(2) DOP and/or product codes.

1-13. Disposition

The veterinary inspection-in-charge will furnish the accountable officer a written disposition recommendation for those lots of product unfit for normal storage, shipment, issue, and/or sale. The recommendation will become part of the inspection reports required by paragraph 1-14 below. (See AR 60-657/NAVSUPINST 4355.4/AFR 161-32/MCO P10110.31 and appendix D for guidance and examples of disposition recommendations.) To comply with the applicable provisions of AR 600-50 and AR 30-18, veterinary personnel (commissioned officers, warrant officer, and noncommissioned officers) cannot serve as a disinterested officer or individual in matters involving subsistence.

1-14. Reports

Reports will be completed according to the following guidance:

a. Closed-package and/or open-package inspection results. The results for each lot inspected will be recorded as required by the responsible major command. A copy of the report will be provided to the accountable officer. A completed sample of DA Form 5301-R (Request and Report of Surveillance Inspection-Class 9) is shown at figure 1-1 as part of the examples of semiperishable inspections discussed in paragraphs C-2 through C-4. For warranty inspections, DD Form 1714 (Product Verification Record) will be used as an inspection worksheet, in addition to other required reports. (See also para F-7K.) DD Form 1714 will be reproduced locally on 8 1/2- by 11-inch paper. A copy for reproduction is located at the back of this regulation. As a minimum for all reports, the following information will be shown:

(1) Lot number (if applicable).

(2) Location of lot.

(3) The estimated remaining shelf life.

(4) Disposition recommendations. (See fig 1-2 for a completed sample of a DD Form 1232 (Quality Assurance Representative's Correspondence).)

b. Copies of all reports will be distributed as follows:

(1) The original will be forwarded to the accountable officer after receipt of all inspection results.

(2) One copy will be filed at the veterinary inspection office.

(3) The second copy will be forwarded to higher headquarters, when requested.

(4) For warranty inspections, a third copy of DD Form 1714 will be prepared and forwarded to the original acquisition agency through technical channels. This copy should also provide information which might result in improvement of acquisition methods, specifications, and/or storage and handling procedures.

c. DD Form 1608 (Unsatisfactory Material Report (Subsistence)). A DD Form 1608 will be prepared, when applicable, according to AR 30-16. Standard Form (SF) 364 (Report of Discrepancy (ROD)) will also be prepared according to DLAR 4140.55/AR 735-11-2/NAVMATINST 4355.73/AFR 400-54/MCO 4430.3, and other regulations or instructions, when applicable.

d. Discrepancy in shipment report. The veterinary service inspector will notify the accountable officer immediately upon discovery of a discrepancy in the shipment. This will allow either the accountable officer or the transportation officer time to prepare an SF 361 (Discrepancy in Shipment Report) according the AR 55-387/NAVSUPINST 4610.33/AFR 756-18/MCO P4610.19/DLAR 4500.15, and other regulations or instructions, when applicable.

For use of this form, see AR 30-1B; the proponent agency is DCSLOG.

Figure 1–1. Completed example of a report of surveillance inspection

DA FORM 5301-R, MAY 84

| QUALITY ASSURANCE REPRESENTATIVE'S CORRESPONDENCE | | | |
|---|--|---|--|
| 1. TO: TISO Bldg. 2891 Fort Wyler, TX 78250 | | 2. FROM: (Name, address, ZIP Code, and office telephone number) SP4 James Smith Vet Svcs Northeast Branch Fort Wyler, TX 78250 227-2145 | |
| 3. CONTRACT, P. O., OR Q. I. NUMBER DLA 13H-82-D1107 | | 4. ITEM Soup, RTS, Chicken Noodle (8 oz cn) NSN 8935-00-480-4553 | |
| 5. PRIME CONTRACTOR NAME, ADDRESS AND ZIP CODE Knox Soup Company 1428 Noodle Avenue Humboldt, TX 73124 | | 6. PLANT NAME, ADDRESS AND ZIP CODE SAME AS BLOCK 5 | |
| <p>SUBJECT: Class 9 Inspection of Soup, RTS, Chicken Noodle</p> <p>1. Lot number: E107</p> <p>2. Location of lot: Building 2891, Section A, Row 12, Site E.</p> <p>3. Inspection results: Currently on hand - 290 cases, 13,920 cans. The following results were obtained from a sample size of 20 cases/315 cans:</p> <p>8 critical defectives (leakers) 11 major defectives (severe dents) 19 minor defectives (moderate dents)</p> <p>4. Estimated remaining shelf-life: 6 months.</p> <p>5. Disposition recommendations: Currently this lot does not present a potential health hazard if leaking cans are not consumed. Recommend this lot be issued prior to existing like-stocks. Instruct food service personnel to remove and discard leaking cans in accordance with TISA/local policy.</p> <p>6. Next inspection due: July 19XX</p> | | | |
| 7. SIGNATURE OF QAR <i>James Smith</i> | | 8. DATE 13 Jun XX | |

DD FORM 1232
1 APR 77

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*U. S. GPO: 1980-310-481/8871

Figure 1-2. Completed example of DD Form 1232

Chapter 2

Inspection of Semiperishable Foods (Other Than Meal, Ready-to-Eat Rations)

2-1. Deterioration of semiperishable foods

Information on deterioration of semiperishable foods is as follows:

a. Storage conditions, particularly high temperatures, can greatly accelerate deterioration of semiperishable foods. As a general rule, each rise of 18 degrees Fahrenheit (°F) (10 degrees Celsius (°C)) from specified storage temperatures doubles the rate of the chemical reaction.

b. Defects frequently associated with semiperishables are listed in appendix B, section I. Standard defect codes are listed in Defense Logistics Agency Manual (DLAM) 4155.5/TB 740-10.

2-2. Inspection level

The initial inspection level for CPI will be S-3 and for OPI will be S-1. (See tables 2-1 and 2-3 respectively.) If determined necessary, an increased rate of sampling may be used as prescribed by table 2-2 for CPI. Level S-2, in accord with MIL-STD 105, will be used for an increased rate of sampling for OPI. Procedures for inspecting semiperishable foods are in appendix C.

2-3. Formation of lot

The formation of lots from which sample units may be selected and inspected will be accomplished as follows:

a. Contractors lot. This lot consists of units of a product that are identical as to—

- (1) Stock number.
- (2) Package size.
- (3) Contractor or ration assembly point.
- (4) Contract number.
- (5) Date of pack (year of pack is the date of pack for operational ration items).
- (6) Quality and storage history.

b. Grand lot. The grand lot consists for one or more lots of like quality grouped together in order to decrease the cost of surveillance inspections by reducing the number of samples. Grand lotting is authorized, but the identity of sublots must be maintained and samples must be drawn from each subplot in proportion to its size. When defects are concentrated in a particular subplot, the subplot should be reinspected separately as a contractor's lot. Grand lotting will be limited to inspection procedures for paper transactions which require no rewarehousing or reworking of material prior to the inspection and to units identical as to—

- (1) Stock number.
- (2) Package size.
- (3) Date of pack.

(a) Month and year is the date of the pack for items with a recommended shelf life less than or equal to 12 months.

(b) Year of pack is the date of the pack for items with a recommended shelf life greater than 12 months.

- (4)* Quality and storage history.

c. Isolated lot. Captured enemy rations and other lots of unknown storage and inspection history must be handled on the individual basis. If the lot is composed of sublots, the sublots will be inspected separately.

2-4. Types of inspections

The types of inspections are as follows:

a. Surveillance inspections. Surveillance inspections may be one of the following:

(1) Any receipt except purchase inspection (class 5). The level of inspection will be S-3 according to table 2-1.

(2) Prior to shipment inspection (class 6) and/or at issue or sale inspections (class 7). A detailed inspection need not be conducted if scheduled inspections have been performed. However, the storage facility commander is not relieved from the responsibility of shipping, selling, or issuing suitable stocks. When a detailed inspection is necessary, the level of inspection will be S-3 according to table 2-1.

(3) During storage inspections (class 9). The inspection level will be S-3 in accordance with table 2-1.

(a) Each lot of semiperishable subsistence will be inspected at least every 3 months. More frequent inspections are needed if conditions at the storage location are below standard, if requested by the accountable officer, or if the inspector has some other reason for increasing the rate of inspection.

(b) Accountable officers (except commissary officers) will provide veterinary service inspection personnel with a monthly listing of all foods requiring inspection. (See AR 30-18, chap 2 and appendix J and other regulations or instructions as applicable.) As a minimum, the listing of foods will include—

1. Name and address of the storage facility.
2. Product nomenclature.
3. Contract number.
4. Date of receipt.
5. Date of pack.
6. Warehouse lot number or location.
7. Number of cases in the lot.

b. Other inspections. Other inspections include the following:

(1) *Warranty inspections.* Compliance or noncompliance with the warranty clause is determined by means of warranty inspections conducted by the quality assurance representative (QAR) at the destination. Any inspection conducted within the warranty period is considered a warranty inspection. If, however, during the warranty period the results of any inspection show excessive deterioration, and/or the stocks are determined to be unserviceable by the QAR, then an inspection will be performed immediately, using the end item inspection critical (for only those defects found) cited in the contract. This inspection will constitute the official warranty inspection and all nonconformances found will be immediately reported.

(2) *Inspection of UBLs.* The level of inspection will be as prescribed in paragraph 2-2.

(3) *Special inspections.* The level of inspection will be as prescribed in paragraph 2-2.

(4) *Isolated lots.* The levels of inspection will be general inspection level II as prescribed in table 2-2. General inspection level III, MIL-STD 105, or 100 percent inspection should be used if even greater discrimination is determined necessary by the inspector.

2-5. Rejection numbers

The rejection number constitutes a warning signal. When defects found do not equal or exceed the rejection number, the inspection is complete. The following guidance will apply:

a. Supplies which meet or exceed the rejection number for critical defects according to table 2-1 for CPI will be inspected further by selecting additional sample units and cases necessary to equal the sample sizes specified in table 2-2 or 100 percent depending on the lot size. Supplies which meet or exceed the rejection number for major and/or minor defects may be further inspected using table 2-2 as described above, if deemed necessary by the inspector.

b. Supplies which meet or exceed the rejection number for critical defects according to table 2-3 for OPI may be further inspected by selecting additional sample units as prescribed by inspection level S-2, MIL-STD 105.

c. The samples for further inspection will be selected as randomly as possible considering available resources and conditions. When further inspection is performed, the combination inspection results will be used in determining disposition recommendations.

2-6. Defective lots and sublots

If defective lots and sublots are found, the following guidance will apply:

a. If the defects equal or exceed the rejection numbers, an appropriate recommendation will be made to the accountable officer, as prescribed by this regulation and AR 60-657/NAVSUPINST 4355.4/AFR 161-32/MCO P10110.31. (See app D for examples of a disposition recommendation.)

b. If defects are concentrated in one or two particular sublots, even though the defects do not equal or exceed the rejection numbers for the lot as a whole, the sublots in question may be individually inspected as contractor lots.

Table 2-1
Master table general inspection level S-3
(Single sampling plan for normal inspection.) (See notes 1, 2, and 3.)

| Unit lot size | Unit sample size (SS) | SQL | ACC | REJ (see note 4) | Minimum number of cases to select when cases are packed with packages/pieces of the following: | | |
|-----------------|-----------------------|-----|-----|------------------|--|----|-----------|
| | | | | | 6 | 12 | 18 and up |
| Under 151 | 5 | 1.5 | 0 | 1 | | | |
| | | 2.5 | 0 | 1 | 2 | 2 | 2 |
| | | 4.0 | 0 | 1 | | | |
| 151-500 | 8 | 1.5 | 0 | 1 | | | |
| | | 2.5 | 0 | 1 | 3 | 3 | 3 |
| | | 4.0 | 1 | 2 | | | |
| 501-3200 | 13 | 1.5 | 0 | 1 | | | |
| | | 2.5 | 1 | 2 | 3 | 3 | 3 |
| | | 4.0 | 1 | 2 | | | |
| 3201-35000 | 20 | 1.5 | 0 | 1 | | | |
| | | 2.5 | 1 | 2 | 5 | 3 | 3 |
| | | 4.0 | 2 | 3 | | | |
| 35001-500000 | 32 | 1.5 | 0 | 1 | | | |
| | | 2.5 | 2 | 3 | 7 | 5 | 4 |
| | | 4.0 | 3 | 4 | | | |
| 500001 and over | 50 | 1.5 | 0 | 1 | | | |
| | | 2.5 | 3 | 4 | 10 | 7 | 5 |
| | | 4.0 | 5 | 6 | | | |

Notes:

¹ When a critical defect is found that could represent a potential health hazard in the entire lot, the lot will be placed on medical hold and a Veterinary Corps officer (VCO) will be consulted.

² If a sample size (SS) equals or exceeds the lot size, do a 100 percent inspection.

³ Defect classification. The following SQLs and corresponding accept (ACC)/reject (REJ) numbers indicate critical, major, and minor defects respectively: Critical—SQL 1.5; major—SQL 2.5; and minor—SQL 4.0.

⁴ When defects found do not equal or exceed the REJ number, the inspection is complete. (See para 2-5.)

Table 2-2
Master table general inspection level II
(Single sampling plan for normal inspection.) (See notes 1, 2, and 3.)

| Unit lot size | Unit (SS) | SQL | ACC | REJ (see note 4) | Minimum number of cases to select when cases are packed with packages/pieces of the following: | | | | | | | |
|----------------|-----------|-----|-----|------------------|--|----|----|----|----|----|----|----|
| | | | | | 6 | 12 | 18 | 24 | 36 | 48 | 72 | 96 |
| Under 500 | 32 | 0.4 | 0 | 1 | | | | | | | | |
| | | 2.5 | 2 | 3 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | 4.0 | 3 | 5 | | | | | | | | |
| 501-3200 | 125 | 0.4 | 1 | 2 | | | | | | | | |
| | | 2.5 | 7 | 8 | 25 | 20 | 20 | 15 | 15 | 10 | 10 | 10 |
| | | 4.0 | 10 | 11 | | | | | | | | |
| 3201-10000 | 200 | 0.4 | 2 | 3 | | | | | | | | |
| | | 2.5 | 10 | 11 | 40 | 30 | 30 | 20 | 15 | 15 | 10 | 10 |
| | | 4.0 | 14 | 15 | | | | | | | | |
| 10001 and over | 315 | 0.4 | 3 | 4 | | | | | | | | |
| | | 2.5 | 14 | 15 | 60 | 50 | 40 | 30 | 20 | 20 | 15 | 15 |
| | | 4.0 | 21 | 22 | | | | | | | | |

Notes:

¹ When a critical defect is found that could represent a potential health hazard in the entire lot, the lot will be placed on medical hold and a VCO will be consulted.

² If a sample size equals or exceeds the lot size, do a 100 percent inspection.

³ Defect classification. The following SQLs and corresponding ACC/REJ numbers indicate critical, major, and minor defects respectively: Critical—SQL 0.4; major—SQL 2.5; and minor—SQL 4.0.

⁴ When defects found do not equal or exceed the REJ number, the inspection is complete. (See para 2-5.)

Table 2-3
Master table general inspection level S-1
(Single sampling plan for normal inspection.) (See notes 1, 2, and 3.)

| Unit lot size | First sample | Unit SS (see note 3.) Combined sample | SQL | ACC | REJ (see note 4.) | Minimum number of cases to elect are as follows: |
|---------------|--------------|--|-----|-----|-------------------|--|
| Under 151 | 2 | 4 | 1.5 | 0 | 1 | 2 |
| | | | 2.5 | 0 | 1 | |
| | | | 4.0 | 0 | 1 | |
| 151-500 | 2 | 4 | 1.5 | 0 | 1 | 2 |
| | | | 2.5 | 0 | 1 | |
| | | | 4.0 | 0 | 1 | |
| 501-8500 | 3 | 7 | 1.5 | 0 | 1 | 2 |
| | | | 2.5 | 0 | 1 | |
| | | | 4.0 | 0 | 1 | |
| 8501 and over | 3 | 11 | 1.5 | 0 | 1 | 3 |
| | | | 2.5 | 0 | 1 | |
| | | | 4.0 | 1 | 2 | |

Notes:

¹ When a critical defect is found that could represent a potential health hazard, the lot will be placed on medical hold and a VCO will be consulted.

² Defect classification. The following SQLs and corresponding ACC/REJ numbers indicate critical, major, and minor defects respectively: Critical—SQL 1.5; major—SQL 2.5; and minor—SQL 4.0.

³ If serviceability of the lot cannot be established by the first sample size, then select additional samples to complete the combined sample size. Additional sampling, in excess of the combined sample size, may be performed at the discretion of the inspector. (See para 2-2.)

⁴ When defects found do not equal or exceed the REJ number, the inspection is complete. (See para 2-5.)

Chapter 3

Inspection of Perishable Foods

3-1. Deterioration of perishable foods

Information on deterioration of perishable foods is as follows (step-by-step inspection procedures are in app E):

a. Storage conditions. Chilled and frozen subsistence continues to deteriorate during storage. The rate of deterioration is directly dependent upon storage conditions, such as temperature, humidity, sanitation, and enzymatic and microbiological action. (See DoD 4145.19-R-1 for more detailed inspection and guidance on storage conditions.)

b. Defects. Defects frequently associated with perishables are listed in appendix B, section II.

3-2. Inspection level

Initial level for CPI will be S-3 according to table 3-1. If a more detailed inspection is necessary, the sample size may be increased using tables 3-2, 3-3, and/or 3-4. The use of SQLs, ACC or REJ numbers, and critical, major, and minor defects are not applicable to surveillance inspections of perishable subsistence. However, acceptable quality levels (AQLs) are necessary for warranty inspections. The sample unit for OPI will be individual packages, pieces, boxes, bags, and so forth. Initially, the sample size will be as follows:

- For lots containing less than 8500 units, one unit will be opened.
- For lots containing 8500 units or more, no less than two units will be opened.
- If a more detailed inspection is necessary, the sample size may be increased using inspection level D-2, MIL-STD 105.

3-3. Formation of lots

The lot size is normally expressed as the number of shipping cases in the lot. Total units (packages/pieces) will be used only when determining open-package sample size. The sample unit for CPI is a shipping case of the product. The sample unit for OPI is a packages or piece. Samples may be selected and inspected from a contractor lot or grand lot. See paragraph 2-3 for lot information. (Date of pack for perishable subsistence is month and year.)

3-4. Types of inspections

The types of inspections are as follows:

- Surveillance inspections.* Surveillance inspections may be one of the following.
 - Any receipt except purchase inspection (class 5). The level of inspection will be S-3, according to table 3-1.
 - Prior to shipment inspection (class 6) and/or at issue or sale inspection (class 7). A detailed inspection need not be conducted in scheduled inspections have been performed. However, the accountable officer is not relieved from the

responsibility of shipping, selling, or issuing suitable stocks. Inspectors, as a minimum, should conduct a cursory examination of the lot prior to shipment, issue, or sale. Then a more detailed inspection is necessary, the level of inspection will be S-3 as prescribed in table 3-1.

(3) During storage inspections (class 9). The inspection level will be S-3 as designated in table 3-1.

(a) Each lot of perishable food will be inspected at least every 30 days. The minimum level of inspection will be S-3 according to table 3-1. Highly perishable foods (shelf life less than 30 days) in the commissary will be monitored daily.

(b) Fresh fruits and vegetables (FF&V) subject to rapid deterioration will be given a cursory inspection daily to determine condition and remaining storage life. If 5 percent or more deterioration is noted on the cursory inspection, then additional inspection will be performed using inspection level S-3 according to table 3-1 to determine the extent of the deterioration. For FF&V, the entire contents of each sample case will be inspected. Results of the inspection will be reported to the accountable officer for appropriate action to preclude further loss to the Government.

(c) Accountable officers (except commissary officers) will provide veterinary service inspection personnel with a monthly listing of foods requiring inspection. (See AR 30-18, chap 9 and app J, and other regulations/instructions as applicable.) As a minimum, the listing will include—

- (1) Name and address of the storage facility.
- (2) Product nomenclature.
- (3) Contract number.
- (4) Date of receipt.
- (5) Date of pack.
- (6) Warehouse number and location.
- (7) Number of cases in the lot.

b. Other inspections. Other inspections include the following:

(1) *Warranty inspections.* Compliance or noncompliance with the warranty clause is determined by means of warranty inspections conducted by the QAR at destination. Any inspection conducted within the warranty period is considered a warranty inspection. If, however, during the warranty period the results of any inspection show excessive deterioration, and/or the stocks are determined to be unserviceable by the QAR, then an inspection will be performed immediately using the end item inspection critical (for only those defects found) cited in the contract. This inspection will constitute the official warranty inspection and all nonconformance found will be immediately reported to the procurement agency.

(2) *Special instructions.* The level of inspection will be as prescribed in paragraph 3-2 above.

(3) *Isolated lots.* The level of inspection will be general inspection level II, as prescribed in table 3-4 for closed-package inspection and paragraph 3-2 for open-package inspection. General inspection level III, MIL-STD 105, or 100 percent inspection should be used if even greater discrimination is warranted on CPI. If even greater discrimination is warranted on OPI, inspection level S-2 should be used. Procedures for inspecting Meal, Ready-to-Eat (MRE) rations are in appendix F.

Table 3–1
Master table general inspection level S–3
(Single sampling plan for normal inspection.) (See notes 1, 2, and 3.)
(Surveillance inspection only.)

| Lot size Number of cases | Minimum number of cases to select when cases are packed with packages/ piece of: | | | Minimum number of packages/pieces for nondestructive inspection |
|-----------------------------|---|---------|-----------|---|
| | 6 or less | 7 to 12 | 13 and up | |
| Under 151 | 2 | 2 | 2 | Inspect a minimum of 3 pack- ages/pieces from each case se- lected percent if less than (LT) 3 (100 per case). |
| 151–500 | 3 | 3 | 3 | |
| 501–3200 | 3 | 3 | 3 | |
| 3201–3500 | 3 | 3 | 5 | |
| 3501–500000 | 4 | 5 | 7 | |
| 500001 and over | 5 | 7 | 10 | |

Notes:

¹ If a sample size equals or exceeds the lot size, do a 100 percent inspection.

² When a critical defect is found that could represent a potential health hazard, the lot will be placed on medical hold and a VCO will be consulted.

Table 3-2
Master table general inspection level S-4
(Single sampling plan for normal inspection.) (See notes 1 and 2.)
(Surveillance inspection only.)

| Lots size Number of cases | Minimum number of cases to select when cases are packed with packages/pieces of: | | | | Minimum number of packages/pieces for nondestructive inspection |
|------------------------------|--|---------|----------|-----------|--|
| | 6 or less | 7 to 12 | 13 to 24 | 25 and up | |
| Under 151 | 2 | 2 | 2 | 2 | Inspect a minimum of 4 packages/pieces from each case selected (100 percent if LT 4 per case). |
| 151-500 | 3 | 3 | 3 | 2 | |
| 501-1200 | 3 | 3 | 3 | 5 | |
| 1201-10000 | 4 | 4 | 5 | 7 | |
| 10001-35000 | 5 | 5 | 7 | 10 | |
| 35001 and over | 6 | 8 | 9 | 15 | |

Notes:

¹ If a sample size equals or exceeds the lot size, do a 100 percent inspection.

² When a critical defect is found that could represent a potential health hazard, the lot will be placed on medical hold and a VCO will be consulted.

Table 3-3
Master table general inspection level I
(Single sampling plan for normal inspection.) (See notes 1 and 2.)
(Surveillance inspection only.)

| Lots size Number of cases | Minimum number of cases to select when cases are packed with packages/pieces of: | | | | | | | Minimum number of packages/pieces for nondestructive inspection |
|------------------------------|--|---------|----------|----------|----------|----------|-----------|--|
| | 6 or less | 7 to 12 | 13 to 18 | 19 to 24 | 25 to 36 | 37 to 48 | 49 and up | |
| Under 281 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | Inspect a minimum of 3 packages/pieces from each case selected (100 percent if LT 6 per case). |
| 281-500 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | |
| 501-1200 | 4 | 4 | 4 | 4 | 4 | 5 | 7 | |
| 1201-3200 | 5 | 5 | 5 | 5 | 5 | 7 | 10 | |
| 3201-10000 | 6 | 6 | 6 | 8 | 8 | 9 | 15 | |
| 10001-35000 | 10 | 10 | 15 | 15 | 20 | 20 | 25 | |
| 35000 and over | 10 | 15 | 15 | 20 | 30 | 30 | 40 | |

Notes:

¹ If a sample size equals or exceeds the lot size, do a 100 percent inspection.

² When a critical defect is found that could represent a potential health hazard, the lot will be placed on medical hold and a VCO will be consulted.

Table 3-4
Master table general inspection level II
(Single sampling plan for normal inspection.) (See notes 1 and 2.)
(Surveillance inspection only.)

| Lots size Number of cases | Minimum number of cases to select when cases are packed with packages/pieces of: | | | | | | | | Minimum number of packages/pieces for nondestructive inspection |
|------------------------------|--|---------------|----------------|----------------|----------------|----------------|----------------|-----------------|--|
| | 6 or less | 7 to 12 | 13 to 18 | 19 to 24 | 25 to 36 | 37 to 48 | 49 to 72 | 73 and up | |
| Under 281 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 7 | Inspect a minimum of 8 packages/pieces from each case selected (100 percent if LT 8 per case). |
| 281-500 | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 10 | |
| 501-1200 | 6 | 6 | 6 | 6 | 8 | 8 | 9 | 15 | |
| 1201-3200 | 10 | 10 | 10 | 15 | 15 | 20 | 20 | 25 | |
| 3201-10000 | 10 | 10 | 15 | 15 | 20 | 30 | 30 | 40 | |
| 10001-35000 | 15 | 20 | 20 | 25 | 30 | 40 | 50 | 60 | |
| 35001 and over | 15 | 25 | 25 | 30 | 35 | 45 | 60 | 70 | |

Notes:

¹ If a sample size equals or exceeds the lot size, do a 100 percent inspection.

² When a critical defect is found that could represent a potential health hazard, the lot will be placed on medical hold and a VCO will be consulted.

Appendix A **References**

Section I

Required Publications

MIL-STDs and MIL-HDBKs may be obtained from the Naval Publications and Forms Center, Code 3015, 5801 Tabor Avenue, Philadelphia, PARTICIPATION 19120-5099, using DD Form 1425 (Specifications and Standards Requisition). All other publications and forms listed below, except DA Form 5301-R, are available through normal publications channels.

AR 30-7

Operational Rations. (Cited in par 1-9a(2).)

AR 30-16

Food Service Data Feedback Program. (Cited in para 1-14c.)

AR 30-18

Army Troop Issue Subsistence Activity Operating Procedures. (Cited in paras 1-13, 2-4a(3)(b), 3-4a(3)(c), and D-2b.)

AR 40-657

/NAVSUPINST 4355.4/AFR 161-32/MCO P10110.31 Veterinary/Medical Food Inspection. (Cited in the summary and paras 1-1, 1-13, 2-6a, C-1g(2), D-2, and E-1g.)

AR 55-38/NAVSUPINST 4610.33/AFR 75-18/MCO P4610.19/DLAR 4500.15

Reporting of Transportation Discrepancies in Shipments. (Cited in para 1-14d.)

AR 710-2

Supply Policy Below the Wholesale Level. (Cited in para 1-9a(2).)

DOD 4145.19-R-1

Storage and Warehousing Facilities and Services. (Cited in paras 1-7, 3-1a, C-2, C-3, C-4f, E-2, and F-1b.)

MIL-HDBK 53

Guide for Sampling Inspection. (Cited in para 1-11.)

TB MED 263

Veterinary Service, Identification of Inspected Foods. (Cited in the note after para 1-10b(2).)

Section II

Related Publications

A related publication is merely a source of additional inspection. The user does not have to read it to understand this regulation.

AR 600-50

Standards of Conduct for Department of Army Personnel

DLAR 4140.55/AR 735-11-2/NAVMATINST 4355.73/AFR 400-54/MCO 4430.3

Reporting of Item and Packaging Discrepancies

DLAM 4155.5/TB 740-10

Quality Control Depot Serviceability Standards

MIL-STD 105

Sampling Procedures and Tables for Inspection by Attributes

MIL-STD 904

Guidelines for Detection, Evaluation, and Prevention of Pest Infestation of Subsistence

Section III

Prescribed Forms

DD Form 1714

Product Verification Record. (Prescribed in para 1-14 and app F.)

Section IV
Referenced Forms**DA Form 5301-R**

Request for Report of Surveillance Inspection-Class 9. (AR 30-18.)

DD Form 1222

Request for and Results of Tests

DD Form 1232

Quality Assurance Representative's Correspondence

DD Form 1608

Unsatisfactory Material Report (Subsistence)

SF 361

Discrepancies in Shipment Report

SF 364

Report of Discrepancy (ROD)

Appendix B Defects of Subsistence

Section I Semiperishable Foods

B-1. Defects most frequently classified as critical

The defects most frequently classified as critical are shown below.

- a. *Swellers*. Swellers due to any reason.
- b. *Oxidation/rancidity*. Chemical changes.
- c. *Mildew/mold/dry rot*. Any discoloration, growth, or decay caused by fungi.
- d. *Leakers*. Leakers due to any reason.
- e. *Contamination*. Presence of matter which is foreign to or deleterious to the product or substance in which it is contained.
- f. *Insect or rodent infestation*.
- g. *Vacuum loss*. Complete loss of vacuum in those products requiring a vacuum.

B-2. Other frequently identified defects (associated with loss of packaging and packing protection)

Other frequently identified defects that are associated with loss of packing and packaging protection are shown below.

- a. Separation/delamination.
- b. Closure failure.
- c. Water damage.
- d. Soiled (spots, stains, dirt).
- e. Physical damage.
- f. Reinforcement failure.
- g. Brittleness (flexible packaging).
- h. Product intermingling (flexible packing).
- i. Corrosion/rust.
- j. Cuts/abrasions/scratches.
- k. Peeling/flaking/chipping.
- l. Etching/grazing/checking.
- m. Detinning, flaking of enamel lining.
- n. Dent.
- o. Breakage.

Section II Perishable Foods

B-3. Defects associated with packing

Defects associated with packing are shown below.

- a. Mildew, mold.
- b. Separation, delamination.
- c. Closure failure.
- d. Water damage.
- e. Soiled (spots, stains, dust).
- f. Physical damage.

B-4. Defects associated with packaging

Defects associated with packaging are shown below.

- a. Brittleness.
- b. Corrosion, rust.
- c. Leakers, pinholes, improper closures.
- d. Detinning, flaking, or enamel lining.
- e. Physical damage.
- f. Vacuum loss.

B-5. Defects associated with the product

Defects associated with the product are shown below.

- a. Brittleness.
- b. Crumbling, cracking.
- c. Hardening.
- d. Caking.
- e. Loss of crispness.
- f. Swellers.
- g. Oxidation/rancidity.
- h. Mildew, mold.
- i. Odor change.
- j. Decay or rot.
- k. Flavor change.
- l. Physical change.
- m. Freezer burn and dehydration.
- n. Separation.
- o. Contamination.
- p. Discoloration.
- q. Freeze damage (chilled items).
- r. Defrosting.
- s. Insect or rodent infestation.
- t. Friability.
- u. Coagulation.
- v. Product intermingling—grease or moisture transfer.
- w. Liquefaction/syneresis.
- x. Evaporation/leakage.
- y. Participation/precipitation/sedimentation/crystallization.
- z. Turbidity.
- aa. Foreign objects.
- bb. Fusion.

Appendix C

Procedures for Inspecting Semiperishable Foods

C-1. Step-by-step procedures for inspecting semiperishable foods

- a. *Step 1.* Determine lot size. The lot size is determined by the number of units of the product in a lot (cans, jars, bottles, cartons, envelopes). Multiply units per case by the number of cases.
- b. *Step 2.* Determine inspection level. paragraph 2-2 gives inspection level S-3, according to table 2-1 for CPI. Inspection level S-1 is prescribed by table 2-3 for OPI
- c. *Step 3.* Select sample cases from lot.
 - (1) Determine how many sample cases to select (based on units per case) as prescribed by table 2-1 and if applicable, table 2-2.
 - (2) Sample cases should be as representative of the lot as practical. Storage conditions should be considered when selecting samples.
 - (3) Select sample cases from sublots as proportionately as practical.
- d. *Step 4.* Select sample units.
 - (1) Determine the number of sample units to select according to table 2-1.
 - (2) Select the sample units proportionately from the sample cases. If different sublots are present, ensure each is represented proportionately.
- e. *Step 5.* Perform closed-package inspection.
 - (1) Inspect each sample unit for defects in appendix B and any other defects that may be applicable. Classify each defects as critical, major, or minor as prescribed by paragraph 1-6.
 - (2) The inspector may perform destructive inspection on units with external major or critical defects. (Refer to para 1-10b.)
 - (3) Submit laboratory samples as deemed necessary.
 - (4) Record results according to paragraph 1-14.
- f. *Step 6.* Perform open-package inspection.
 - (1) This phase is normally performed according to paragraph 1-10.

(2) Select the correct number of open-package sample units from units drawn in step 4, which showed no critical or major defects during the closed-package phase. If a variety of products prevents selecting a unit of each food item, select those items which normally deteriorate more rapidly.

(3) Open each sample unit and inspect for the defects in appendix B and any other defects that may be applicable. Classify each defect as critical, major, or minor according to paragraph 1-6. Record results according to paragraph 1-5. If the defects found do not equal or exceed the rejection numbers given in table 2-1 and/or table 2-3, the inspection is completed.

(4) Lots exceeding the SQL 1.5 critical defects (per table 2-1 for CPI) will be further inspected using general inspections level II (table 2-2) or 100 percent, depending on the lot size. The results of this additional inspection will be recorded as prescribed by paragraph 1-14 and used in determining disposition of the lot.

(5) Submit laboratory samples as deemed necessary.

g. Step 7. Determine disposition recommendation.

(1) If defects are concentrated in particular sublots, the inspector should consider treating each subplot as a contractor's lot and performing additional in.

(2) When the defects found equal or exceed the rejection number given for the appropriate inspection and serviceability quality level (tables 2-1 through 2-3), determine appropriate disposition per appendix D of this regulation and AR 60-657/NAVSUPINST 4355.4/AFR 161-32/MCO P10110.31.

h. Step 8. Prepare inspection reports. Inspection reports will be prepared according to paragraph 1-14.

C-2. Step-by-Step example procedure for inspecting canned pineapple

An inspector is directed to perform a class 9 inspection on a lot consisting of 3500 cases of pineapple, regular pack, packed 6 cans per case. The lot has not exceeded the storage life recommended in DoD 4145.19-R-1. Previous inspection findings indicate it to be a good product.

a. Step 1. Determine lot size. Lot size equals 21,00 cans (3500 cases by 6 units per case).

b. Step 2. Determine inspection level. Paragraph 2-2 lists an inspection level S-3 for CPI.

c. Step 3. Select sample cases from lot. According to table 2-1, five cases were selected from the lot (product packed six units per case) as representative as practical.

d. Step 4. Select sample units from the sample cases. According to table 2-1, the unit sample size was 20 cans, so the inspector selected 4 units from each case.

e. Step 5. Perform CPI. Each sample unit was examined for critical, major, and/or minor defects. The examination revealed no critical, one major (a severe dent), and two minor defectives. Destructive inspection of the defective unit with the major defect was not performed.

f. Step 6. Perform OPI. OPI was not performed on this lot for the following reasons:

(1) It did not exceed the recommended storage life.

(2) It is not an isolated lot.

(3) Storage conditions have not been adverse.

(4) The inspector had no reason to suspect internal deterioration.

g. Step 7. Determine disposition recommendation.

(1) The inspector found no critical defectives, one major defective, and two minor defectives.

(2) Using the SQLs and corresponding ACC/REJ numbers (warning signals) from table 2-1, it was determined that none of the rejection numbers had been equaled or exceeded.

(3) Based on the above information, the lot was fit for normal storage and issue.

h. Step 8. Prepare inspection reports. The lot does not exceed serviceability requirements; therefore, the only written report was the one required by the MACOM according to paragraph 1-15. (Refer to fig 1-1 for an example.)

C-3. Step-by-Step example procedure for inspection of canned soup

The veterinary food inspection specialist at a TISA is instructed to conduct a class 9 inspection consisting of 580 cases of soup, chicken noodle, ready-to-serve, 8-ounce can, packed 48 cans to the case. This was a grand lot composed of three sublots from different manufacturers. All sublots had exceeded the recommended storage life specified in DoD 4145.19-R-1.

a. Step 1. Determine lot size. Lot size is 27,840 cans (580 cans by 48 units per case). Examination showed 290 cases in subplot A and 145 each in subplot B and C, so the inspector determined the sublots were represented in a 2:1:1 ration.

b. Step 2. Determine inspection level. Par 2-2 gives the inspection level S-3 for CPI.

c. Step 3. Select sample cases from the lot. The inspector used table 2-1 and determined that a MINIMUM of 3 sample cases must be selected from the lot (product packed 48 cans per case with a lot size of 27,840 units). Since the sublots are represented in a 2:1:1 ration, the inspector selected tow cases from subplot A and one each from sublots B and C.

d. Step 4. Select samples from the sample cases. Table 2-1 specified a sample size of 20 units. Therefore, the inspector selected the sample units based on the 2:1:1 ration as follows:

- (1) Sublot A-10 Cans, 5 from each case.
- (2) Sublot B-5 cans.
- (3) Sublot C-5 cans.

e. Step 5. Perform CPI. Each sample unit was examined for critical, major, and minor defects. The examination revealed two critical (leakers), one major (severe dent), and two minor (moderate dent) defectives. The defectives were all from subplot A samples. Destructive inspection on the critical and major defectives was not performed.

f. Step 6. Perform OPI.

(1) Based on closed packages inspection results (leakers) and because the product exceeds the recommended storage life specified in DoD 4145.19-R-1, the inspector performed OPI.

(2) Using table 2-3, the inspector determined that a minimum of three cans of the product must be opened. To maintain proportional sampling (2:1:1), four cans were selected for OPI (such as two cans from subplot A, and one each from sublots B and C). The sample units were taken from the original closed-package sample units which did not show critical or major defects during step 5. The four cans were opened and the product was normal.

g. Step 7. Determine disposition recommendation. The inspector noted that the number of critical defectives (leakers) exceeded the rejection number (table 2-1). Under paragraphs 2-5 and 2-6, the inspector performed an additional inspection on subplot A according to table 2-2.

C-4. Step-by-step additional inspection

a. Step 1. Determine the lot size. The lot size is 13,290 cans (290 cans by 48 units per case).

b. Step 2. Determine the inspection level. General level II was used by table 2-2 and paragraph 2-.

c. Step 3. Select additional sample cases from the lot. According to table 2-2, the inspector determined a minimum total of 20 cases of the product must be selected from the lot. (Product packed 48 units per case.) Since 2 cases (10 units) had already been inspected, an additional 18 cases were selected from the lot as representatively as practical.

d. Step 4. Select additional sample units from sample cases. According to table 2-2, the inspector determined a minimum total of 315 units were to be inspected. Since 2 cases (10 units) had already been inspected, an additional 305 units were selected. The inspector selected 305 units from the 18 additional cases selected in step 3.

e. Step 5. Perform CPI. The inspector examined each sample unit for the presence of critical, major, and minor defects. The examination revealed 6 critical (leakers), 10 major (severe dents) and 17 minor (moderate dents) defectives. The total results were as follows:

- (1) 8 critical defectives (leakers).
- (2) 11 major defectives (severe dents).
- (3) 19 minor defectives (moderate dents).

f. Step 6. Perform OPI. Based on CPI results and because the product exceeded the recommended storage life as listed in DoD 4145.19-R-1, additional OPI is conducted according to table 2-3. Nine additional sample units were opened (2 subplot A sample units had been opened previously) for a combined open-package sample size of 11. No defects were noted.

g. Step 7. Determine disposition recommendation.

(1) Sublot A. Since the number of critical and major defects exceeded the table 2-2 ACC/REJ numbers (warning signals), a recommendation other than normal storage and issue was made.

(2) Sublots B and C. Since no defects were noted, normal storage and issue recommendations were made.

h. Step 8. Prepare inspection reports.

(1) Inspection results for all three sublots will be recorded and a copy of the reports or results provided to the accountable officer according to paragraph 1-14. (See fig 1-1 for an example.)

(2) A DD Form 1232 will be prepared and distributed for subplot A according to paragraph 1-14. (See fig 1-2 for an example.)

Appendix D

Examples of Disposition Recommendations

D-1. Questions to consider

The following questions should not be considered when developing a disposition required. They will not apply in every instance but may be used as general guidelines.

- a.* Is this a wholesomeness problem?
- b.* How rapidly is the product expected to deteriorate?
- c.* How much time will elapse before the product can be consumed.

- d. Does the sample equal or exceed the reject number?
- e. Is the product to be shipped to another installation for further storage?
- f. What are the storage conditions at present and what will they be in the future?
- g. What is the shelf life of the product?

D-2. Disposition recommendations

Disposition recommendations will be as prescribed by AR 60-657/NAVSUPINST 4355.4/AFR 161-32/MCO P10110.31 and this regulation. Listed below are several examples of disposition recommendations; however, these examples are not all inclusive. Inspections must base their recommendations on many factors, especially those factors listed in D-1 above.

- a. Recommend that the product be (SALVAGED)(RECONDITIONED)(REPACKED) and the portion that is fit for human consumption be issued immediately.
- b. Recommend that this product be considered as a mandatory issue (AR 30-18) item and issued prior to (date).
- c. Recommend that the product be force issued as soon as possible but no later than (date).
- d. Recommend that this item be issued prior to like subsistence of an older date of pack.
- e. Recommend that the product be placed on hold pending further inspection. (SPECIFY SAMPLE UNIT OR COMPONENT TO BE INSPECTED, IF APPROPRIATE).
- f. Recommend that the product be placed on medical hold pending laboratory testing of samples.
- g. Recommend that the product be issued locally.
- h. Recommend the following change in storage method for this product: (SPECIFIC RECOMMENDATION).

Appendix E

Procedures for Inspecting Perishable Foods

E-1. Step-by-step procedures for inspecting perishable foods

- a. *Step 1.* Determine lot size. Lot size is expressed as the number of shipping cases in the lot. Total units will be used only when determining open-package sample size.
- b. *Step 2.* Determine inspection level. Paragraph 3-2 specified inspection level S-3, according to table 3-1 for CPI and uses and "8500" rule for determining the OPI sample size.
- c. *Step 3.* Select sample cases from the lot. The sample should be as representative of the lot, as practical. Storage conditions should be considered when selecting samples.
- d. *Step 4.* Select sample units from the sample cases.
 - (1) Determine the minimum number of units (packages/pieces) to be used for nondestructive inspection. Refer to tables 3-1 through 3-4, as applicable.
 - (2) Select the sample units from the sample cases.
- e. *Step 5.* Perform CPI.
 - (1) Inspect each sample unit for defects in appendix B and any other defects that may be applicable. Classify each defect as critical, major, or minor as prescribed in paragraph 1-6.
 - (2) The inspector may perform destructive inspection on any sample unit showing external major or critical defects. (Refer to para 1-10b.)
 - (3) Record results according to paragraph 1-14.
- f. *Step 6.* Perform OPI in accordance with paragraph 1-10.
 - (1) This inspection is normally performed as prescribed in paragraph 1-10.
 - (2) Select the open-package sample units from units drawn in step 4 which showed no critical or major defects during the closed-package phase.
 - (3) Open each sample unit and inspect for defects in appendix B and any other defects that may be applicable. Classify each defect as critical, major, or minor according to paragraph 1-7. Record results according to paragraph 1-14.
 - (4) Submit laboratory samples if necessary.
- g. *Step 7.* Determine what disposition will be recommended. Based on inspection results, inspector's subjective evaluation, laboratory results when performed, and past experience with like products, determine appropriate disposition according to appendix D of this regulation and AR 60-657/NAVSUPINST 4355.4/AFR 161-32/MCO P10110.31.

E-2. Step-by-step example procedure for inspection of beef pot roasts

An inspector was directed to perform a class 9 inspection on a lot of 65 cases of beef pot roasts. The lot had exceeded the storage life recommended in DoD 4145.19-R-1. Previous inspection findings indicated the product was in good condition.

- a. *Step 1.* Determine lot size. Lot size was determined to be 65 cases.
- b. *Step 2.* Determine inspection level. According to paragraph 3-2, an inspection level S-3 (table 3-1) was used for CPI and the "8500" rule was used to determine open-package sample size.
- c. *Step 3.* Select sample cases from the lot. The inspector consulted table 3-1 and selected the minimum of two sample cases (lot size under 151), as represented as practical.
- d. *Step 4.* Select units from the sample cases. As prescribed by table 3-1, the inspector selected a minimum of three pot roasts from each sample case.
- e. *Step 5.* Perform CPI. Each sample unit was examined for critical, major, and minor defects. The examination revealed no defective sample units.
- f. *Step 6.* Perform OPI. The inspector consulted paragraph 3-2 and selected 1 pot roast for OPI (65 cases by the average number of pot roasts per case; one example 10 pot roasts per case would be 650 units). The sample unit was taken from the original closed-package sample units which did not show critical or major defects during step 5. The roast was inspected and no defects were noted.
- g. *Step 7.* Determine disposition recommendation. The lot was fit for normal storage and issue.
- h. *Step 8.* Prepare inspection reports. Since the lot was fit for normal storage and issue, the only report necessary was the one required by the MACOM according to paragraph 1-14. (Refer to fig 1-1 for an example.)

Appendix F

Procedures for Inspecting Meal, Ready-to-Eat Rations

F-1. Types of inspections

The following types of inspections may be performed on Meal, Ready-to-Eat (MRE) rations:

- a. *Receipt inspection.* All MRE rations will receive a detailed inspection upon receipt.
 - (1) MREs received from known sources with known storage histories will be inspected as outlined in tables F-1 through F-6.
 - (2) MREs received from unknown sources (lost lots, isolated lots of unknown storage history) will be inspected for the defects listed in tables F-2 through F-6, using a sample size corresponding to general inspection level II (table F-1B). If greater discrimination is warranted, 100 percent inspection will be implemented.
- b. *In-storage (cyclic) inspection.* A detailed inspection performed on a scheduled basis. The frequency of these inspections will be as follows:
 - (1) Monthly for distressed lots, regardless of age.
 - (2) Every 3 months for lots that are within 6 months of or have already exceeded the recommended shelf life prescribed in chapter 5, section V, DoD 4145.19-R-1.
 - (3) Every 6 months for lots that have more than 6 months recommended shelf life remaining.
- c. *Inspection prior to shipment or issue.* An inspection usually performed for condition only. A detailed inspection will not be conducted if scheduled inspections have been performed. However, if MREs scheduled for shipment or issue have not received a receipt and/or cyclic inspection, they will receive a special inspection as described in paragraph d below.
- d. *Special inspection.* A detailed inspection performed as the result of a request from the accountable officer, based on a complaint from a using activity. Also, an inspection conducted when the responsible veterinary inspector determines a lot needs inspection prior to the next scheduled inspection. Special instructions may be performed using the sample sizes provided in table F-1A. If an increased sampling rate is desired, general inspection level (table F-1B) or 100 percent inspection may be used.

F-2. Laboratory analysis

- a. When doubt exists concerning the conditions of MREs, samples will be submitted to the appropriate laboratory for analysis. Samples should not be submitted for evaluation of characteristics which can be determined adequately by the inspector. An exception would be when a large lot or high dollar item(s) exhibit(s) an off-flavor, -odor, -color, or -texture, or when necessary facilities and equipment are not available to the inspector. When the laboratory can furnish objective values and the inspection is limited to subjective evaluations, laboratory results should be used in making final disposition recommendations. Laboratory samples will consist of three units of the abnormal product and three units of the normal product, if possible. If only normal or abnormal units are available, six units should be sent.
- b. Section A of DD Form 1222 will be completed and forwarded with samples. The form will contain a history of the product, with information that will be helpful in the laboratory evaluation, and the reasons for the need of a laboratory examination. When doubt exists as to what testing to request, the laboratory will be consulted. Such consultation will preclude the needless submission of samples and waste of resources.

F-3. Insect and/or rodent infestation

Inspectors will inspect MREs and storage areas for signs of insect and/or rodent infestation. Inspection guidance may be found in MIL-STD 904.

a. Insect infestation. When insects are found, inspectors will collect specimens for positive laboratory identification. After the specimens have been identified, the veterinary officer-in-charge will make disposition recommendations in accordance with MIL-STD 904 and the laboratory report.

b. Rodent infestation. Evidence of rodent infestation includes the finding of feces, urine (as evidenced by a positive Wood's light test), and/or holes gnawed through packing or packaging material. When such evidence is found, the veterinary officer-in-charge will make disposition recommendations in accordance with MIL-STD 904.

F-4. Additional sampling

Additional sampling is encouraged whenever the inspector feels additional samples are necessary to determine the serviceability of a specific lot (such as if a reject number is equaled or exceeded).

F-5. Classification of defects (percent defective)

Each sample will be examined for the defects listed in table F-2 through F-6. A sample containing one or more defects will be classified as a defective. Each defective will be classified by the most serious defect it possesses. For example, each defective meal bag will be classified by only one defect although it may possess defects listed in each of tables F-3 through F-6. If a defective has more than one defect, its most serious defect will be reported in block 25 of DD Form 1714 and its other defects will be reported in the "Remarks" section, block 28.

F-6. Inspection reporting

Receipt, cyclic, and special instruction of MREs will be recorded on the DD Form 1714. A copy of the report will be sent to Headquarters, U.S. Army Health Services Command, ATTN: HSVS-FS, Fort Sam Houston, TX 78234-600. Additional copies will be furnished to the appropriate MACOM as required.

F-7. Step-by-step inspection procedures for MREs

a. Step 1. Determine lot size. Lot size will be determined in accordance with chapter 2, paragraph 2-3. For table F-2 examinations, lot size will be expressed as shipping containers. For subsequent tables, the lot size equals the number of meals (the number of shipping container multiplied by 12 meals per container). Except when general inspection level II is used, grand lotting is authorized and encouraged. The identity of the sublots will be maintained, and samples will be drawn from each subplot in proportion to its size. If a reject number for a grand lot is equaled or exceeded, each subplot must be reinspected separately as a contractor's lot. However, if defects are concentrated in a particular subplot, that subplot may be reinspected as a contractor's lot and the remaining subplot may be reinspected as a grand lot.

b. Step 2. Determine sample size. The sample size will be determined by using table F-1 and F-1A (or table F-1 and F-1B for general inspection level II).

c. Step 3. Select sample cases.

(1) The number of sample cases will be as indicated in step 2. Samples will be drawn from each subplot in proportion to its size.

(2) In situations where storage conditions of a lot differ (for example, part of a large lot is located next to steam pipes), samples will be selected from areas within the lot most likely to undergo deterioration.

(3) In situations where storage conditions are basically the same throughout the lot, samples will be selected to be representative of the lot.

d. Step 4. Perform inspection of the shipping container. Each sample shipping container will be examined for the defects listed in table F-2.

e. Step 5. Select sample meals.

(1) The number of meals selected for closed package inspection will be as indicated in step 2. Meal bag samples will be drawn proportionately from sample shipping containers. At least 1 of each menu, 1 thorough 12, will be represented.

(2) Twelve of these samples, also representing each of the 12 menus, will be identified as open package destructive inspection samples. If possible, these samples should also proportionately represent each of the sublots. If there are more than 12 sublots, the samples should be chosen from 12 sublots representative of a lot as a whole. In situations where storage conditions of a lot differ (for example, part of a large lot is located next to a steam pipe), sublots from areas within the lot most likely to undergo deterioration should be among the 12 from which samples are selected.

(3) Sublot identity will be maintained for all samples.

f. Step 6. Perform inspection of unopened meal bags. Each sample bag will be examined for the defects listed in table F-3.

g. Step 7. Perform inspection of meal bag components. The meal bags selected during step 5 will be opened by

cutting just below the seal, being careful not to damage the contents. The components of the meal bags (except accessory bags) will be examined for the defects listed in table F-4. Sublot identity will be maintained.

h. Step 8. Perform inspection of the accessory bags. The unopened accessory bags from meal bags opened in step 7 will be examined to ensure the packaging material protect the components. Suspected leakers will be tested in a vacuum chamber, using the procedures given in paragraph F-8. After the leakage examination, the components will be removed by cutting just below the seal of each accessory bag, going careful not to damage the contents. The accessory bags and components will be examined for the defects listed in table F-5. Sublot identity will be maintained.

i. Step 9. Perform open package destructive inspection. All food components (including food components in the accessory bags) of the 12 sample meals bags identified as open package destructive inspection samples in step 5 will be examined for the defects listed in table F-6. Reject numbers will be 1 for critical defects, 2 for major defects, and 4 for minor defects. If reject numbers are equaled or exceeded, 12 additional meal bags will be opened. When defects are concentrated within one subplot, additional sample should be taken from the affected menu. If 24 meals are inspected, reject numbers will be 1 for critical defects, 2 for major defects, and 6 for minor defects. Although the reject numbers for critical and major defects are the same regardless of the sample size, the inspector should nevertheless open 12 additional meals to allow determination of appropriate disposition recommendations.

j. Step 10. Repack remaining accessory bags, meal bags, and sample cases.

(1) Meal bags and accessory bags must be resealed as follows:

(a) Using 2-inch-wide tape, apply one-half of the width across the top of one side of the bag. Allow at least one-half of the tape to extend past each side of the bag.

(b) Gently press the bag to expel air, fold the remaining half of the tape over the top of the bag, and smoothly apply the tape to seal the other side of the bag.

(c) Press down firmly on the tape to eliminate any air spots.

(d) Trim the ends of tape, allowing approximately one-half inch of tape to extend past each side of the bag.

(2) Attempt to repack 12 different menus into each case.

(3) Use high-tensile-strength tape to seal the case, then replace the sleeve and secure it in place with additional tape. Do not use masking tape!

k. Step 11. Complete DD Form 1714. DD Form 1714 will be used to record detailed inspections of MREs. A complete example is provided in figure F-1. Step-by-step procedures for completion of the DD Form 1714 are as follows:

(1) *Block 1.* Enter the contract number.

(2) *Block 2.* Enter the lot number(s). If sufficient space is not provided to record all lot numbers of a grand lot, enter "See Remarks," then enter numbers in the "Remarks" section, block 28.

(3) *Block 3.* Enter the date of inspection.

(4) *Block 4.* Enter the name and address of the MRE assembly plant.

(5) *Block 5.* Enter the lot size expressed as shipping containers.

(6) *Block 6.* Enter "N/A."

(7) *Block 7.* Enter the location of the MREs.

(8) *Block 8.* Check "Other," and enter receipt, cyclic, or special. Explain reasons for special inspection in the "Remarks" section, block 28.

(9) *Block 9.* Check "% defective."

(10) *Block 10.* Enter "Meal, Ready-to-Eat," and date of pack.

(11) *Block 11.* Enter the inspection test date. (See fig F-1.)

(12) *Block 12.* Enter "N/A."

(13) *Block 13.* Enter "AR 40-656, NAVSUPINST 4355.10 or MCO 10110.45" as applicable and date of publication.

(14) *Block 14.* Enter the condition code assigned after completing the inspection. Condition codes should correlate with disposition recommendations. (See fig F-1.)

(15) *Block 15.* Enter "See Remarks," then enter disposition recommendation in the "Remarks" section, block 28. Examples of disposition recommendations, for lots equaling or exceeding REJ numbers, are provided in paragraph F-9.

(16) *Block 16-24.* Complete as shown in figure F-1. The table F-2 major defect data must be listed above the first line to allow all necessary data to fit into the space provided.

(17) *Block 25.* When defects are found, record the table of examination under 25A, the defect number under 25B, and the number of defects under 25C, as shown in figure F-1. Record in this block only the most serious defect of each defective meal. Record the meal's other defects in the "Remarks" section, block 28.

(18) *Block 26.* Enter the typed name and signature of the actual inspector.

(19) *Block 27.* Enter the typed name, rank, and location code of the supervisor.

(20) *Block 27A.* Enter the signature of the supervisor after review of the completed inspection report.

(21) *Block 28.* Enter the date the next inspection is due and any other information necessary. Enter the AUTOVON telephone number of the inspection office.

F-8. Leakage testing procedures

a. Wet method (meal bags, accessory bags, vacuum-packed dehydrated items).

(1) Fill the vacuum chamber with water until three-fourths full. Seal the lid and gasket.

(2) De-gas (remove dissolved CO₂ and O₂) by applying a vacuum of 25 inches of mercury for 30 seconds. Release the vacuum, and remove the lid. This step is needed only before inspecting the first item after filling the bell jar and does not need to be performed before inspecting each subsequent item.

(3) Place the item into a wire mesh basket or other suitable device that will keep the bag submerged in the bell jar and allow maximum surface area visibility. Invert the wire basket, and submerge it in the water.

(4) Replace the lid and gasket. Slowly apply a vacuum of 15 inches of mercury for 30 seconds. Observe for a steady progression of bubbles. Occasional bubbles of air that may have been trapped in the seal should not be mistaken for the steady stream of bubbles that will confirm a leak.

b. Dry Method (thermostabilized, wet-pack items).

(1) Gently massage the contents away from the suspected leak area to dislodge any product contents that may plug the leak. Care must be taken to preclude making defects by rupturing intact seals.

(2) Place the suspected item in the dry vacuum chamber, and slowly apply a vacuum of 25 inches of mercury for 2 minutes. Continuously observe the item for evidence of oil or liquid product seepage. This test is not 100 percent conclusive because food particles can plug the hole and prevent seepage of the product or fluid.

See note* below.

F-9. Disposition recommendations

a. Below are points that should be considered when developing a disposition recommendation. They will no apply in every instance but may be used as general guidelines.

(1) Does this defect affect wholesomeness?

(2) How rapidly is the product expected to deteriorate?

(3) How much time will elapse before the product can be consumed?

(4) Does the sample equal or exceed the reject number?

(5) Is the product to be shipped to another installation for further storage?

(6) What are the storage conditions at present, and what will they be in the future?

b. Disposition recommendations will be in accordance with AR 60-657/NAVSUPINST 4355.4/AFR 161-32/MCO P10110.31 and this document. Listed below are several examples of disposition recommendations which may be used on DD Forms 1232 or 1714. When recommending destruction of MREs, specify the components covered by the recommendation. Normally, only the affected components, not the entire ration, will be destroyed.

(1) Recommend this product be (salvaged) (reconditioned) (repacked) and the portion that is fit for human consumption be issued immediately.

(2) Recommend this product be issued prior to (date).

(3) Recommend this product be issued as soon as possible but not later than (date).

(4) Recommend this product be issued first. (Use this recommendation when a product with a recent date of pack is deteriorating faster than a product with an older date of pack.)

(5) Recommend this product be issued locally rather than shipped to (a forward area) (another station).

(6) Recommend the following change in storage method of this product: (Specific recommendation).

(7) Hold pending further inspection. (Specify sample size or component to be inspected, if appropriate.)

(8) Hold pending laboratory testing of samples.

c. The examples in subparagraph b above are not all inclusive. The inspector will base recommendations on the condition found. If REJ numbers are equaled or exceeded, the disposition recommendation "Fit For Continued Storage" is inappropriate and should not be used.

d. The disposition recommendation for a grand lot cannot be other than "Fit For Continued Storage." If a reject number for a grand lot is equaled or exceeded, each subplot must be reinspected separately as a contractor's lot. However, if defects are concentrated in a particular subplot, that subplot may be reinspected as a contractor's lot and the remaining sublots may be reinspected as a grand lot.

* Note: All verified leakers will be removed from the lot and destroyed.

Table F-1
Table of examination

| Table | Sample unit |
|---|----------------------------------|
| F-2—Inspection of shipping container | Shipping container (see note 1). |
| F-3—Inspection of unopened meal bag | Meal bag. |
| F-4—Inspection of meal bag components | Meal bag. |
| F-5—Inspection of accessory bag | Accessory bag. |
| F-6—Open package destructive inspection | Meal bag (see note 2). |

Notes:

¹ If necessary, the sample size indicated in table F-1A will be increased to the sample size for the next lot size category, so that at least one case from each subplot is examined. Reject numbers used will be appropriate to the sample size.

² Sample size for open package destructive inspection will be 12 meal bags. Reject number will be 1 for critical defects, 2 for major defects, and 4 for minor defects. If reject numbers are equaled or exceeded, 12 additional meal bags will be opened as explained in step 9.

Table F-1A
Inspection criteria for tables F-2 through F-5 (see note 1)

| Lot size | First SS | | | Second SS (see note 2) | Combined SS (see note 2) | Combined SS | |
|-----------------|--------------------------|---------------------|---------------------|---------------------------|-----------------------------|---------------------|---------------------|
| | First SS (see note 2) | ACC (see note 3) | REJ (see note 3) | | | ACC (see note 3) | REJ (see note 3) |
| 0–3200 | 0 | 1 | | 24 | 36 | 1 | 2 |
| | 1 | 2 | | | | 2 | 3 |
| | 3 | 4 | | | | 7 | 8 |
| 3201–35000 | 0 | 1 | | 24 | 48 | 2 | 3 |
| | 1 | 2 | | | | 3 | 4 |
| | 5 | 6 | | | | 10 | 11 |
| 35001–500000 | 0 | 1 | | 48 | 84 | 3 | 4 |
| | 2 | 3 | | | | 5 | 6 |
| | 7 | 8 | | | | 14 | 15 |
| 500001 and over | 0 | 1 | | 72 | 120 | 5 | 6 |
| | 3 | 4 | | | | 7 | 8 |
| | 10 | 11 | | | | 21 | 22 |

Notes:

¹ Table F-1A will be used as follows:

a. For grand lots: If a reject number in the first SS is equaled or exceeded, each subplot must be reinspected separately as a contractor's lot. However, if defects are concentrated in a particular subplot, that subplot may be reinspected as a contractor's lot and the remaining sublots may be reinspected as a grand lot.

b. For contractor's lots: If a reject number in the first SS is equaled or exceeded, the second SS will be pulled. If a reject number for the combined SS is equaled or exceeded, appropriate disposition recommendations (other than 'Fit For Continued Storage') should be made (see para F-9).

² If the SS equals or exceeds lot size, perform 100 percent inspection.

³ ACC/REJ criteria are given for critical, major, and minor defects respectively.

Table F-1B
General inspection level II

| Lot size | SS (see note 1) | ACC (see note 2) | REJ (see note 2) |
|----------------|--------------------|---------------------|---------------------|
| Under 500 | 36 | 0 2 7 | 1 3 8 |
| 501-3200 | 120 | 1 7 21 | 2 8 22 |
| 3201-10000 | 204 | 2 10 21 | 3 11 22 |
| 10001 and over | 312 | 3 14 21 | 4 15 22 |

Notes:

¹ If sample size equals or exceeds lot size, perform 100 percent inspection.

² ACC/REJ criteria are given for critical, major, and minor defects respectively.

Table F-2
Inspection of shipping container

| Major | Minor | Defect |
|-------|-------|---|
| 151 | | Rodent damage or evidence of insect penetration (see note 1). |
| 152 | | Box damaged (contents exposed). |
| 153 | | Fewer than 12 meals per case. |
| | 201 | Straps loose or missing (see note 1). |
| | 202 | Inside case stapled seam (when present) not covered with cardboard protector or tape. |
| | 203 | Essential marking missing or illegible (see notes 1 and 2). |
| | 204 | Not 1 of each menu 1-12. |

Notes:

¹ Specify defect(s) observed.

² For example: Assembly point information, dates of pack, and lot number should be legibly marked on all cases.

Table F-3
Inspection of unopened meal bag

| Major | Minor | Defect |
|-------|-------|---|
| 151 | | Rodent damage or evidence of insect penetration (see note 1). |
| 154 | | Tear, cut, or hole in meal bag; |
| | 203 | Essential marking missing or illegible (see notes 1 and 3). |
| | 205 | Missing tear notch. |

Notes:

¹ Specify defect(s) observed.

² All sample meal bags will be tested in a vacuum chamber for leakage, using the procedures given in paragraph F-8. Defect description for leakers will include the location of the leak.

³ For example: identification markings or list of menu components.

Table F-4
Inspection of meal bag components

| Critical | Major | Minor | Defect |
|----------|-------|-------|--|
| 101 | | | Tear, cut, or hole in any component bag; leakage (see note 1). |
| 102 | | | Swollen retort pouches (see note 2). |
| 103 | | | Missing entree component. |
| 104 | | | Evidence of insect or rodent penetration (see note 3). |
| | 155 | | Missing component (other than entree). |
| | 156 | | Loss of vacuum (vacuum-packaged items only) (see note 4). |
| | 203 | | Essential labeling missing or illegible (see notes 3 and 5). |
| | 205 | | Missing tear notch. |
| | 206 | | Broken, damaged, or unserviceable spoon (see note 3). |
| | 207 | | Unclean component. |

Notes:

¹ Suspected leakers will be tested in a vacuum chamber using the procedures in paragraph F-8. Defect description for leakers will include the location of the leak.

² Cake items may exhibit more internal air than meat or fruit items and should not be considered as swellers unless open package examination reveals deterioration or contamination.

³ Specific defect(s) observed.

⁴ Firmly grasp the edges of the package, and attempt to pull or stretch the material away from the product for a short time. An intact bag will return to its original shape when pressure is released. Gently attempt to move the product within the bag by pressing on the product's edge. If there is no vacuum, the product will move easily within the bag. The leak is then confirmed by mechanically testing the package in the vacuum chamber. Procedures for vacuum chamber testing are provided in paragraph F-8.

5. For example: identification information, preparation instructions.

Table F-5
Inspection of accessory bag

| Critical | Major | Minor | Defect |
|----------|-------|-------|--|
| 104 | | | Evidence of insect or rodent penetration (see note 1). |
| | 155 | | Missing component. |
| | 157 | | Tear, cut, or hole in accessory bag; leakage (see note 2). |
| | 158 | | Unserviceable component. |
| | 205 | | Missing tear notch. |
| | 207 | | Unclean component. |

Notes:

¹ Specific defect(s) observed.

² Defect description for leakers will include the location of the leak.

Table F-6
Open package destructive inspection (see note 1)

| Critical | Major | Minor | Defect |
|----------|-------|-------|---|
| 104 | | | Evidence of insect or rodent penetration (see note 2). |
| 105 | | | Moldy or mildewed product. |
| 106 | | | Foreign material. |
| 107 | | | Extreme odor, flavor, or physical change (see note 2). |
| | 159 | | Odor, color, or flavor change (see note 2). |
| | 160 | | Texture change. |
| | 161 | | Component crushed, limiting serviceability. |
| | 162 | | Failure of product to rehydrate/reconstitute properly. |
| | 206 | | Broken, damaged, or unserviceable nonfood component (see note 2). |
| | 208 | | Incorrect pouch item inside pouch folder. |
| | 209 | | Caking or hardening of component. |
| | 210 | | Brittle, friability, crumbling, cracking, loss of crispness (see note 2). |
| | 211 | | Liquefaction/Syneresis (see note 2). |

Notes:

¹ Internal defects of this table will not be scored if the cause for the defect was due to loss of package integrity scored under tables F-4 or F-5.

² Specify defect(s) observed.

| PRODUCT VERIFICATION RECORD | | | | | 1. CONTRACT NUMBER | | | | | |
|--|---|---|------------------------------------|---|---|---|--------------------------------------|-----------------------------|---------------------|--------------------------------|
| For use of this form, see AR 40-656; the proponent agency is the Office of The Surgeon General | | | | | DLA 13H-83-C-0986 | | | | | |
| 2. LOT NUMBER See Remarks (Block 28) | | 3. DATE OF VERIFICATION 1 Apr XX | | 4. PRIME CONTRACTOR (Name, City and State) Right-Away Foods Corporation McAllen, TX 78501 | | | | | | |
| 5. LOT SIZE 72,670 | | 6. VERIFICATION OF N/A <input type="checkbox"/> CONTRACTOR <input type="checkbox"/> QCR | | 7. PLANT LOCATION (City and State) Marine Corps Log. Base, Barstow, CA | | | | | | |
| 8. DRAWN FROM <input type="checkbox"/> ORIGINAL LOT <input type="checkbox"/> RESUBMITTED LOT <input checked="" type="checkbox"/> OTHER (Specify) Cyclic | | | | | 9. DEFECTS BASED ON <input type="checkbox"/> DHU <input checked="" type="checkbox"/> % DEFECTIVE | | | | | |
| 10. ITEM DESCRIPTION Meal, Ready-to-Eat, Mar XX | | | | 11. TYPE OF VERIFICATION Inspection Test Date Mar XX | | 12. RESULTS OF VERIFICATION <input type="checkbox"/> COMPARABLE N/A <input type="checkbox"/> NON-COMPARABLE | | | | |
| 13. SPECIFICATION NUMBER AND DATE AR 40-656 | | | | 14. NUMBER OF LOTS VERIFIED TO DATE Condition Code A | | 15. DISPOSITION See Remarks <input checked="" type="checkbox"/> ACCEPTED <input type="checkbox"/> REJECTED | | | | |
| SAMPLING PLANS | | | | | | | | | | |
| 16. EXAMINATION F-2 Shipping Bx | 17. INSP. LEVEL N/A | 18. AQL N/A | 19. CLASS OF DEFECT MAJOR | 20. <input type="checkbox"/> CONTR. <input type="checkbox"/> QCR | | 21. ACCEP- TANCE NUMBER 2 | 22. REJEC- TION NUMBER 3 | 23. VERIFICATION SAMPLE | | 24. ACTION NUMBER N/A |
| | | | | A. SAMPLE SIZE | B. NO. OF DEF | | | A. LOT SAMPLE SIZE | B. NO. OF DEF | |
| F-3 Meal Bag | | | MINOR | 36 | N/A | 7 | 8 | 72,670 | | |
| F-4 Meal Bag Components | | | MAJOR | 48 | | 3 | 4 | 872,040 | 2 | |
| | | | MINOR | | | 10 | 11 | | | |
| | | | CRITICAL | 48 | | 0 | 1 | 872,040 | | |
| | | | MAJOR | | | 3 | 4 | | 3 | |
| | | | MINOR | | | 10 | 11 | | 1 | |
| F-5 Accy Bag | | | CRITICAL | 48 | | 0 | 1 | 872,040 | | |
| | | | MAJOR | | | 3 | 4 | | | |
| | | | MINOR | | | 10 | 11 | | | |
| F-6 Open Pkg | | | CRITICAL | 24 | | 0 | 1 | 872,040 | | |
| | | | MAJOR | | | 1 | 2 | | 2 | |
| | | | MINOR | 5 | 6 | | | | 2 | |
| 25. RESULTS (CONTINUED ON REVERSE SIDE) | | | | | | | | | | |
| A. EXAMINATION | B. DEFECTS | | | | C. TALLY | | | | | |
| | | | | | MAJOR: | MINOR: | | | | |
| Table F-2 | 152 - Box Damaged (Contents Exposed) | | | | 1 | | | | | |
| Table F-3 | 154 - Leakage Menu #4 Assembler's Seal at 10" Menu #12 Body at 12" | | | | 1 1 | | | | | |
| Table F-4 | 156 - Loss of Vacuum Strawberries Potato Patty 207 - Unclean Cocoa Beverage Powder | | | | 2 1 1 | | | | | |
| Table F-5 | 161 - Crushed Strawberries 209 - Hardening, Cream Substitute | | | | 2 2 | | | | | |
| 26. TYPED NAME AND SIGNATURE OF ASST. QCR (When applicable) | 27. TYPED NAME OF SENIOR QCR OR SQCR AND OFFICE SYMBOL | | | | 27A. SIGNATURE | | | | | |
| SP5 Liza McCue | C.L. Wright, SFC, 1064 | | | | C.L. Wright | | | | | |

DD 1714

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

Figure F-1. Completed example of DD Form 1714

Figure F-1. Completed example of DD Form 1714—Continued

Glossary

Section I **Abbreviations**

ACC

accept

AQL

acceptable quality level

Bldg

Building

C

Celsius

CN

can

CND

canned

CNS

cans

CO₂

carbon dioxide

CPI

closed package inspection

DA

Department of the Army

DLA

Defense Logistics Agency

DLAM

Defense Logistics Agency Manual

DOD

Department of Defense

DOP

date of pack

DPSC

Defense Personnel Support Center

F

Fahrenheit

FF&V

fresh fruit and vegetables

FSC

Federal Supply Classification

HQDA

Headquarters, Department of the Army

ITD
inspection test date

LT
less than

MACOM
major Army command

MCI
meal, combat, individual

MIL
master item identification lists

MIL HDBK
military handbook

MIL-STD
military standard

MRE
meal, ready-to-eat

N/A
not applicable

NRDEC
Natick Research, Development, and Engineering Center

OPI
open package inspection

QAR
quality assurance representative

REJ
reject

RTS
ready to serve

SF
Standard Form

SP4
Specialist Fourth Class

SQL
serviceability quality level

SS
sample size

TB MED
technical bulletin medical

TISA
troop issue subsistence activity

TISO

troop issue subsistence officer

TSG

The Surgeon General

UBL

unit basic load

VCO

Veterinary Corps officer

Vet Svc

Veterinary Service

Section II**Terms****Accessory bags**

Commonly referred to as accessory packets or accessories. They are fabricated by laminating polyethylene on aluminum foil and laminating the opposite side of the foil to polyester.

Cursory examination

A visual examination to detect obvious discrepancies in condition.

Date of pack

Date on which the product was packaged in the unit or primary container, regardless of packing or shipping DOP for operational rations is usually the date when components are assembled and packed into shipping containers.

Defective

A unit with one or more defects.

Food packets

Short-term sources of nourishment for use in special situations. The packets consist of prepared foods selected for maximum nutritional value, palatability, stability, and minimum weight and cubage. One or more food packets do not necessarily constitute a nutritionally complete ration. These rations consist of the following:

- a. Food packet, assault.
- b. Food packet, survival, general purpose.
- c. Food packet, survival, abandon aircraft.
- d. Food packet, survival, aircraft, life raft.
- e. Food packet, survival, abandon ship.

Grand lotting

Collecting or grouping two or more lots of like quality in order to decrease the cost of surveillance inspections by reducing the number of samples.

Inspection level

The relationship between the lot size and the sample size.

Inspection test date

A date for inspection occurring a specified number of months after the date of pack, as indicated in the contract for shelf life.

Lot (inspection lot)

A collection of units of a product from which a sample is to be drawn and inspected.

Lot size

The number of units of a product in a lot.

Meal

A specific quantity of nutritionally balanced food provided one person during a scheduled serving period. A combination of three meals (breakfast, lunch, dinner) constitutes a ration.

Meal bag

Bags made from polyethylene tubing that is approved for food use. There are two seals on the bag, one at each end of the tube. Each meal bag contains all the components for one meal or menu.

Operational ration

A ration composed of semiperishable foods designed for use in time of war or other emergencies.

Perishable foods

Foods that require refrigeration during transportation and storage.

Pouches (flexible packages)

Flexible containers used in the MRE, as opposed to rigid containers (cans) used in the MCI. They are multilayered, consisting of three different materials.

Ration

A quantity of nutritionally adequate food required for one person to subsist for 1 day.

Ration supplements

Food, beverage, condiment, or comfort items that add to the minimum essentials of a specific operational food item for nutrition, palatability, and enhancement of morale. These supplements consist of the following:

- a.* Ration supplement, sundries pack
- b.* Ration supplement, beverage pack.
- c.* Ration supplement, aid station.

Sample

One or more units of a product drawn from a lot for inspection.

Sample size

The number of units of a product in the sample.

Sample unit (unit of a product)

The object inspected to determine its classification as defective or nondefective. Units of a product are expressed as cans, jars, bottles, cartons, meals, menus, envelopes, packets, and so forth.

Semiperishable foods

Foods that do not require refrigeration during transportation or storage.

Serviceability

The fitness of a subsistence item for its intended purpose.

Serviceability quality level

The maximum percent defective that, for the purpose of sampling inspection, may be considered satisfactory.

Serviceability standard

Documents which contain instructions for the inspection, testing, and/or restoration of items.

Service-owned foods

All Government-owned foods procured by appropriated and nonappropriated funds.

Storage life (shelf life)

The total elapsed time from the date of pack to the date of issue for immediate consumption. The appropriate storage life given in various serviceability standards (sometimes reflected in an ITD) is the best estimate of expected life. Specific lots of subsistence may be expected to show signs of quality loss within plus-or-minus 20 percent of the time listed.

Sublot

Identifiable collection of units of a product contained within a lot.

Subsistence

Food for, and provisions to be used in, feeding of personnel and animals.

Tear notch

A slit, tear, or notch on meal bags, accessory bags and pouches designed to aid users in opening the bag or pouch.

Thermostabilized

An item hermetically sealed into a container and processed by heat at a specified sterility level.

Vacuum-packaged

A process in which pouches are sealed inside a vacuum chamber. This removes most of the air and thus reduces the deterioration effects of oxygen on the food. Inspection for loss of vacuum is done visually and verified by means of vacuum chamber testing.

Section III**Special Abbreviations and Terms**

There are no special terms.

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